

**STATEMENT OF BASIS
FOR FINAL PERMITTING ACTION
UNDER 9 VAC 5 Chapter 80 Article 1 (TITLE V-CLEAN AIR ACT)**

VA-30529
Martinsville Thermal, LLC
P.O. Box 717
Ridgeway, Virginia 24148

Frith Drive, Henry County
UTM Coordinates are ZONE: 17 EASTING: 601.68 km NORTHING: 4055.90 km

- * - PTE based on 30% coal, 70% wood firing 8760 hours/year and 2/15/02 permit limits.
- ** - CO based on high AP-42 emission factor.

TITLE V PROGRAM APPLICABILITY BASIS:

This facility has the potential to emit 247.03 tons per year of SO₂, 210.24 tons per year of NO_x, and 231.26 tons per year of CO. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, Martinsville Thermal, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 9 VAC 5 Chapter 80 Article 1.

When EPA revised AP-42 emission factors for wood combustion, major increases resulted for some HAP calculated emissions. As a result, the Martinsville facility is now a major source of HAPs if operated with the existing permit limitations on annual fuel combusted. Because of this revision of emission factors by EPA, the facility is now subject to the provisions of 40 CFR 63 in accordance with Section 112 (j) of the Clean Air Act, and the recent revisions of the Virginia State Toxics regulations unless the facility enacts limitations prior to the regulatory dates established in 40 CFR Part 63.

LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emission units in a Title V source:

- a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.
- b. Any term or condition of any preconstruction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
- c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5 Chapter 50 (9 VAC 5-50-10 et seq.) or 9 VAC 5 Chapter 60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under § 111, 112 or 129 of the federal Clean Air Act.
- d. Any requirement concerning accident prevention under § 112(r)(7) of the federal Clean Air Act.
- e. Any compliance monitoring requirements established pursuant to either § 504(b) or § 114(a)(3) of the federal Clean Air Act or these regulations.
- f. Any standard or other requirement for consumer and commercial products under § 183(e) of the federal Clean Air Act.

- g. Any standard or other requirement for tank vessels under § 183(f) of the federal Clean Air Act.
- h. Any standard or other requirement in 40 CFR Part 55 to control air pollution from outer continental shelf sources.
- i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.
- j. With regard to temporary sources subject to 9 VAC 5-80-130, (I) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
- k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
- l. Any standard or other requirement governing solid waste incineration under §129 of the Clean Air Act.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5 Chapter 80 Article 1 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the state but is not federally-enforceable is identified in the draft Title V permit as such.

MONITORING

The permit to modify and operate dated February 15, 2002 (which superseded the permit to construct and operate dated April 8, 1981, as amended on March 20, 1989 and May 9, 1989) requires an opacity monitoring system with a recorder and alarm, a CO monitor with a co-located O₂ diluent monitor, and a continuous steam flow monitor with recorder (CSFMS) be installed on the boiler. Monitoring operation conditions require that these systems be calibrated, properly maintained, and operated at all times while the boiler is operational.

SO₂ compliance monitoring will be performed through sulfur analysis of the coal of each coal shipment and daily records of the amount of coal and wood consumed. The SO₂ contribution from wood will be determined by use of the emission factor submitted in the March 15, 1981 permit application. Annual compliance will be determined by average coal sulfur analysis, coal consumption, and SO₂ contribution from woodwaste consumption, calculated monthly as the sum of each consecutive twelve month period.

Particulate Matter (includes PM₁₀), Nitrogen Oxides (NO_x), Sulfur Dioxide (SO₂), Carbon Monoxide (CO), and Volatile Organic Compounds (VOC) compliance monitoring will be performed through daily, monthly, and annual records of the amount of coal and wood consumed. Annual compliance will be determined by coal and woodwaste consumption, calculated monthly as the sum of each consecutive twelve month period.

PERIODIC MONITORING

OPACITY

Monitoring of opacity will require the source to at least one time per week observe for the presence of visible emissions from the boiler stack. If visible emissions are present, a visible emission evaluation (VEE) must be conducted in accordance with EPA Method 9 (reference 40 CFR 60, Appendix A) for a minimum of six (6) minutes. If any of the observations exceed the opacity limitation of 20%, the observation period shall continue until a total of sixty (60) minutes of observation have been completed. Timely corrective action shall be taken, if necessary, such that the boiler resumes operation within the 20% opacity limit. The source must maintain a stack observation log to demonstrate compliance. The log will include the date and time of any observations, whether or not there were visible emissions, the results of all VEEs, and any necessary corrective action.

STACK TESTS

The permittee shall conduct an initial stack test for PM, CO, and NO_x to determine compliance with the emission limits in the underlying NSR and Title V permit. The test results will be reduced and reported in accordance with 9 VAC 5-50-30.

REQUEST FOR VARIANCES OR ALTERNATIVES:

Construction and operation – The following NSR Condition #1 of permit dated February 15, 2002:

The permitted facility shall be constructed and operated as proposed in the permit application dated August 28, 1980, including amendment information dated March 15, 1981, December 19, 1988 and May 9, 1989, as modified February 15, 2002.

has been streamlined out of the Title V permit; NSR permit applications themselves are not a federally-enforceable document; rather, the permits written from the information contained in the applications are. The source has been constructed consist with the referenced permit applications and the operation of the facility is dictated by the operation permit itself.

Initial Compliance Testing -

The source has requested an extension for testing requirements in their NSR permit dated February 15, 2002 on June 19, 2002. The 18- month extension granted by DEQ – West Central Regional Office expires on January 19, 2004. The extension, and any subsequent extensions requested are dependant upon the source's ability to achieve maximum production due to possible economic factors limiting steam production of the facility. The steam/ energy market in the area has dwindled and customers for steam in the area are somewhat sporadic, therefore DEQ allows the request for extensions of the normal NSR compliance timeframe.

Given the status of the source's operation at this time, EPA requires the Title V testing to be performed within the following timeframes:

The testing required by this Title V permit shall be performed within 180 days after achieving the maximum production rate at which the facility will be operated, or when actual calculated emissions surpass fifty percent (50%) of the annual allowable emission levels as provided in the permit, or within 12 months prior to the expiration of this permit, whichever is sooner. Unless otherwise required by the Department of EPA, no more than one set of performance tests shall be required during the Title V permit term.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal-operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board referred to is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by § 2.1-20.01:2 and § 10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general conditions cites the entire Article(s) that follow:

B.2. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

B.3. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

This general condition cites the sections that follow:

- B. 9 VAC 5-80-80. "Application"
- B.2. 9 VAC 5-80-150. "Action on Permit Applications"
- B.3. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-80. "Application"
- B.4. 9 VAC 5-80-140. "Permit shield"
- B.5. 9 VAC 5-80-80. "Application"

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excesses emissions reporting within 4 hours. Section 9 VAC 5-80-250 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title 5 facilities. Section 9 VAC 5-80-250 is from the Title 5 regulations. Title 5 facilities are subject to both Sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within 4 day time business hours of the malfunction.

Please note there are two proposed regulation changes that could affect this condition. The requirement listed in section 9 VAC 5-20-180 to report excesses emissions within 4 business hours may be changed to require reporting of excess emissions within 6 hours. The requirement listed in section 9 VAC 5-40-50 C and 9 VAC 5-50-50 C to submit a written report of excess emissions on a quarterly may be changed to allow semiannual reporting.

In order for emission units to be relieved from the requirement to make a written report in 14 days the emission units must have continuous monitors and the continuous monitors must meet the requirements of 9 VAC 5-50-410 or 9 VAC 5-40-41.

This general condition cites the sections that follow:

- F. 9 VAC 5-50-50. Notification, Records and Reporting
- F.1. 9 VAC 5-50-50. Notification, Records and Reporting
- F.2. 9 VAC 5-50-50. Notification, Records and Reporting

This general condition contains a citation from the Code of Federal Regulations as follows:

- F.2.a. 40 CFR 60.13 (h). Monitoring Requirements.

H. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition H and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

- H.2.d. 9 VAC 5-80-110. Permit Content
- H.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

FUTURE APPLICABLE REQUIREMENTS:

This 120 MMBtu/hr Keeler watertube boiler will be subject to 40 CFR 63 Subpart DDDDD; National Emission Standards for Hazardous Air Pollutants from Industrial, Commercial and Institutional Boilers and Process Heaters. This MACT standard has not been proposed as of the time of this permit issuance.

COMMENT PERIOD:

The public notice appeared in the *Martinsville Bulletin* on September 8, 2002.

30-day Public Comment beginning date: 9/9/02 ending date: 10/9/02
All written comments were addressed to the following individual and office:

Pamela J. Derk
Environmental Specialist II – Air Division
Department of Environmental Quality
West Central Regional Office
3019 Peters Creek Road NW
Roanoke, VA 24019
Phone: (540) 562-6732 Fax: (540) 562-6729

Comments from EPA – Region III were received October 4, 2002 and addressed in the proposed permit to the Environmental Protection Agency for a 45-day review period. The review period expired on November 25, 2002, with no additional comments received.

PROCEDURE FOR REQUESTING PUBLIC HEARING:

During the public comment period any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for a public hearing shall be in writing to the above address and shall state the nature of the issues proposed to be raised in the hearing. The Director shall grant such a request for a hearing if he concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

There was no request for a public hearing during the comment period.